A FATAL CASE OF POISONING WITH OIL OF GAULTHERIA.

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THE rarity of cases of fatal poisoning with oil of gaultheria makes the case we are about to report of some interest. It occurred at the Polyclinic Hospital in the service of Dr. McKee, through whose courtesy we are enabled to report it.

The patient, Fannie H., a child, aged two years, was brought to the hospital about 9.30 A.M., on April 18, 1903, by its mother, who said that it had swallowed the contents of a bottle, which she brought with her. As the bottle had been bought by the patient's father at the pharmacy in the hospital, it was easy to determine that it contained commercial oil of wintergreen, which is in reality oil of birch. It was estimated that the child had taken a drachm of the drug. The child had vomited several times before being brought to the hospital, and continued to do so until lavage could be done. Examination showed a temperature of 98.6° F.; pulse 100, regular, and of good volume; respirations 26, and regular.

There was nothing abnormal in the child's appearance, and it showed no evidences of suffering pain. There were no further symptoms for two hours, when the patient seemed to have pain in the abdomen, was drowsy, and complained of great thirst. The pulse rate increased to 150, and within an hour the child's face became flushed, the respirations were somewhat labored and irregular, and there were evidences of impaired hearing and some hallucinations of vision. The temperature was not increased, but there were slight twitchings of the hands and the muscles of the neck, and at this time delirium was first noticed. There was diarrhœa and a strong odor of oil of gaultheria in the stools.

At 3 P.M. the temperature was 99.4° F.; pulse 132, and of good volume; respiration regular, but somewhat labored. At 3.30 P.M., seven hours after the drug had been taken, the child had a general convulsion, in which the arms and legs were extended, eyes rotated upward, head thrown back, neck rigid, but there was no arching of the back. The pupils were equal and were moderately dilated. This tonic spasm lasted about half a minute and recurred at frequent intervals. The pulse was of fair volume, but was slightly irregular, and the respirations were deep, labored, and gradually decreased in rate to four or five per minute. These symptoms increased until, finally, the child died of respiratory failure at 6.30 P.M., ten hours after the ingestion of the poison. About three hours before death the child was catheterized, and salicyluric acid was found in the urine. An autopsy was not obtained.

In view of the frequent use of oil of wintergreen as a therapeutic agent and the comparative rarity of poisoning by this drug, it may be of interest to note that von Rottenbiller[1] believes that the poisonous effects are due to impure preparations, the result of imperfect methods. He cites cases of poisoning by oleum ricini, due to ricin in impure preparations, and thinks poisoning by oleum gaultheriæ analogous to these.

Hare and Wood,[2] from experiments on dogs, concluded that oil of gaultheria acted as a respiratory and vasomotor stimulant. While this result is verified by the reports of some who have observed cases of poisoning in man, it will be seen that in the case reported above there was at no time any evidence of respiratory stimulation, the only effect observed being depression, which became so marked as to be the immediate cause of death.

Gallaher[3] reports the case of a boy who after taking half an ounce of oleum gaultheriæ had marked gastrointestinal symptoms and an inordinate appetite, but no nervous symptoms. He recovered in two weeks, under a treatment which consisted of bleeding, leeching, and cupping.

Hamilton[4] reports a case in which there was almost entire absence of gastrointestinal symptoms. In his case a young woman took half an ounce of oleum gaultheriæ after having swallowed an equal amount of oleum morrhuæ. She had hallucinations of hearing and vision, extreme stupor, rapid pulse and respirations, and left hemiparesis. She recovered.

Pinkham[5] reports a case which lends added interest to the subject in showing its medicolegal importance. A woman took one ounce of oleum gaultheriæ to produce abortion. She died in fifteen hours, after showing symptoms of gastrointestinal and nervous disturbance.

Jewett,[6] Halderman,[7] and Pillsbury[8] report fatal cases following the ingestion of from three drachms in Halderman's to two ounces in Pillsbury's case. In the latter case an unusual symptom was erythema and an intense itching of the skin.

Abel[9] reports a case seen by Dr. Ott in which the symptoms resembled those seen in acute alcoholism. The patient was a child aged three years, who died eighteen hours after taking one-half pint of oil of birch.

Van Wagenen[10] saw two fatal cases, one in a boy, aged two years, who died twenty-four hours after taking one drachm.

Beck[11] mentions a fatal case, and also refers to the cases of six soldiers who were made ill after drinking a tea which contained, among other ingredients, some oil of wintergreen. They all recovered.

Potter[12] refers to a case which is probably the same one mentioned by Beck, but he gives no reference.

REFERENCES.

1. Von Rottenbiller. Klinisch-Therapeutische Wochenschrift, Mai, 1900.
2. Hare and Wood. Therap. Gaz., 1873–78.
3. Gallaher. Medical Examiner, June, 1852.
4. Hamilton. New York Medical Journal, 1875.
5. Pinkham. Trans. Massachusetts Medical Legal Society, Boston, 1878–87.
6. Jewett. New York Medical Gazette, 1867–68.
7. Halderman. Lancet-Clinic, 1886.
8. Pillsbury. Medical Record, New York, 1900.
9. Abel. Medical Gazette, 1885, p. 299.
10. Van Wagenen. Philadelphia Medical Journal, 1900; Medical Record, New York, 1868.
11. Beck. Medicine and Jurisprudence, vol. ii. p. 933.
12. Potter. Materia Medica, Pharmacology and Therapeutics, p. 326.

THE SIGNIFICANCE OF URINALYSIS IN PREGNANCY, WITH ESPECIAL REFERENCE TO ECLAMPSIA.

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Opinions are so various at the present time with regard to the significance of urinary conditions during pregnancy, and especially with regard to the presence or absence of glucose or albumin, that a few pertinent cases in the experience of the writer have led him to briefly discuss the following questions:

1. What are the customary findings of urinalysis during a (clinically) normal pregnancy?
2. What variations from the normal may be noted, and what is their significance?
3. What dependence can be placed upon urinalysis as a warning of impending eclampsia?

The first question is by no means the most easily answered of the three, if one bases his reply upon the statements gathered from the current discussion of the subject by those who do purely obstetrical work. There seems to be as much diversity of opinion as to whether albumin or glucose may be found in the urine of a strictly normal pregnancy as there is with regard to the origin of these substances. One author states that a trace of either albumin or glucose has no significance, while another assures the student that the appearance of either renders the prognosis grave for the mother and child.

It may be stated as a general working rule, none the less, that the urinary picture which is normal for the ordinary conditions of